

would doubtless belong) to be compared with skulls of *R. sumatrensis*. Mr. Manson had stated that the front horn of his specimen was $8\frac{1}{2}$ inches high, the second merely a stud between the eyes.

Mr. Sclater remarked that this was the third¹ recorded occurrence of a Two-horned Rhinoceros north of the Bay of Bengal.

Mr. Sclater also called attention to the fact that Mr. W. Jamrach had just imported a young living specimen of the Rhinoceros of the Bengal Sunderbans, which was either *Rhinoceros sondaicus* or a very closely allied form². Mr. Sclater had lately examined this animal, which was of the female sex, and measured about 3 feet in height. At this time of life there was certainly no appearance of a horn on the nose.

Mr. Sclater exhibited a small living Amphibænian (*Blanus cinereus*) which had been accidentally brought to England in the roots of a hot-house plant from Port St. Mary, Spain, and had been presented to the Society by John Goddard, Esq., Elmer Lodge, Beckenham.

The following papers were read:—

1. On the Mammals of Asia Minor. By CHARLES G. DANFORD, F.Z.S., and EDWARD R. ALSTON, F.L.S., F.Z.S.

[Received February 20, 1877.]

(Plate XXXI.)

The general lack of information as to the fauna of Asia Minor seems to render an apology unnecessary for the introduction of the following very imperfect list of the mammals known to inhabit that country.

In drawing up this catalogue, reference has been made to various notes which have appeared in our 'Proceedings'³, which relate chiefly to the districts of Trebizond and Erzeroum, and also to a few notices of animals in various books of travels⁴, especially in those of Mr. Ainsworth and M. Tchihatcheff. To these are added the animals either observed by Danford, or ascertained by him to occur in the country.

¹ One being that of the specimen of *R. lasiotis* now in the Gardens, and the second that recorded P. Z. S. 1875, p. 566.

² See P. Z. S. 1876, p. 751.

³ E. T. Bennett, "Observations on several Mammalia from Trebizond and Erzeroum," P. Z. S. 1835, pp. 89, 90. E. D. Dickson and H. J. Ross, "Notes accompanying a Collection of Birds (&c.) from Erzeroum," P. Z. S. 1839, pp. 119-123. C. G. Danford, "Notes on the Wild Goat (*Capra agagrus*, Gm.)," P. Z. S. 1875, pp. 458-468.

⁴ Of these we may mention:—Ainsworth, 'Researches in Assyria, Babylonia, and Chaldea' (London, 1838); Spratt and Forbes, 'Travels in Lycia' (Lond. 1847); Baker, 'Lares and Penates' (Lond. 1853); Curzon, 'Armenia' (Lond. 1854); Tchihatcheff, 'Asie Menerre' (Paris, 1856); and Kotschy, 'Reise in d. Cilicischen Taurus' (Gotha, 1858).



J Smit lith

M&N Hanhart imp.

MUS MYSTACINUS



The districts which he had an opportunity of becoming personally acquainted with are as follows:—

1. The neighbourhood of Ismid, at the head of the gulf of the same name.
2. The low country to the south-east of Smyrna nearly to Denizlû, especially the valleys of the Greater and Lesser Meander.
3. The bushy plains at Adalia, and part of the mountainous district of Lycia near that port.
4. The high wooded mountain-ranges of the Bulgar Dagh and Ala Dagh, in the Cilician Taurus.
5. The country which lies between these mountains and the Black Sea, and which, with the exception of a few oak-scrub- and forest-covered ranges near the shores of the latter, consists principally of a barren undulating plateau, having a mean elevation of about 3500 feet.

The time spent in most of these localities was short; and the season of the year at which they were visited was either winter or early spring.

Both these facts argue strongly against the list being at all an exhaustive one, especially as regards the Bats, Insectivores, and Rodents, many more species of which will doubtless be found to inhabit the country. This paper, therefore, must be taken merely as a contribution to our knowledge of the mammalian fauna of Asia Minor.

With regard to the distribution of the species in adjoining countries, we have consulted Geoffroy St.-Hilaire for Greece¹, Kotschy for Cyprus², Pallas³ and Ménériés⁴ for the Caucasus, Canon Tristram for Palestine⁵, Mr. Blanford for Persia⁶, and Dr. Severtzoff for Turkestan⁷.

The species of which specimens were brought home are marked with an asterisk; those of which the evidence of occurrence seems doubtful are not numbered and are enclosed in brackets.

1. **VESPERUGO SEROTINUS* (Schreber).

Common in the central districts. Some specimens were obtained at the village of Issa-fakyr, near Yuzgat. There is a range of low rocky hills here, on which grows a little oak-scrub, and by the roadside are a few orchards, vineyards, and willow trees.

This was the only Bat obtained, although many other species will doubtless be found to occur.

2. **CROCIDURA LEUCODON* (Herm.).

Common in the mountains. It has been found in the Caucasus by Eichwald, and in Turkestan by Dr. Severtzoff. According to

¹ Expéd. Scient. en Morée, Zoologie, pp. 10-18.

² Unger und Kotschy, Die Insel Cypern, p. 570.

³ Zoogr. Rosso-Asiat. vol. i.

⁴ Catalogue Raisonné, pp. 16-25.

⁵ P. Z. S. 1866, pp. 84-93.

⁶ Eastern Persia, ii, pp. 18-97.

⁷ Turkestantanskie Jevotnie (the Mammal portion translated by F. C. Craemers, Ann. & Mag. Nat. Hist. xviii, pp. 40, 168, 208, 325, 377, 1876).

Canon Tristram, the common Shrew of North Palestine is *C. aranea* auct.¹; and closely allied (if distinct) species have been described from Persia and Georgia.

3. ERINACEUS EUROPÆUS, Linn. ?

A Hedgehog which is not uncommon in various parts of the country probably belongs to this species, which is known to inhabit the Lebanon and the Caucasus; but specimens obtained in the Smyrna district on Danford's visit to the country were not preserved.

4. FELIS UNCIA, Schreb. *Kaplan*.

Not common, but generally distributed in the mountains near Smyrna and on those bordering the southern coasts. The Ounce of Asia Minor was specifically separated by Valenciennes under the name of *Felis tulliana*², but our friend Mr. D. G. Elliot, who has examined the typical specimens, can find no trustworthy distinctive characters.

This animal, though generally very shy, sometimes shows great daring. On one occasion, after firing several shots at a small herd of Wild Goats, Danford was following up a wounded male, which shortly afterwards fell over a cliff. To reach the spot where he lay, a circuit had to be made, which took not more than ten minutes; but on coming to the place nothing remained but a pool of blood and a few handfuls of hairs; the tracks of two Ounces were easily discernible in the patches of snow; nor did he ever see any thing more either of the Goat or the thieves. The natives both trap and shoot Ounces, and great value is set upon their skins.

5. *FELIS CATUS, Linn. *Yaban kedi* (Wild Cat).

A male and female of this species were obtained among the rocks near Zebil, at an elevation of 3000–4000 feet. The natives say they are not uncommon. Their principal food appears to be a species of Mouse (*Mus mystacinus*, see p. 279), of which no less than fourteen were found in the stomach of one of the Cats trapped. In these skins the ground-colour is of a clearer grey, and the dark markings of the flanks are much more broken up into distinct spots, than in European examples of the species.

[*FELIS LYNX, Linn.

A fine skin obtained in Constantinople, and stated to be from Asia Minor, is nearly uniform light rufous above, with obscure spots on the flanks, and markings on the limbs hardly darker than the colour of the back; the terminal third of the tail is black. It agrees well with Blyth's *F. isabellina*³ from Tibet; but we do not think that the form is more than a variety of *F. lynx*, which has

¹ *Sorex russulus* (Zimm.), not *S. araneus*, Linn.

² Compt. Rend. Ac. Paris, xlii. p. 1035. Figured by Tchihatcheff, As. Min., Zool. pl. i.

³ Journ. As. Soc. Beng. xvi. pt. ii. p. 1178.

7 skins,

from marshes in

Asia Minor

Danfoid 14/7/79

long been known to inhabit the Caucasus, and which Dr. Severtzoff found in Turkestan at a considerable elevation.]

6. **FELIS PARDINA*, Temm. *Ushak*.

Rare. A small skin was procured, and a very fine one seen at Kaisariyeh. Canon Tristram has doubtfully referred the *Wushak* of the Arabs of Palestine to this species, which is also said to be common in European Turkey. In Asia Minor it appears to be generally much rarer than the Caracal, although Ainsworth records that no fewer than eight individuals were observed by his party in one day on Tchokúr Ovah, near Missisáh (Missis?).

7. **FELIS CARACAL*, Linn. *Kara koulak* (black-ears).

Skins were procured from the neighbourhood of Smyrna, where the Caracal is said to be tolerably common. Of these an adult is much grizzled in colour, owing to the development of the whitish tips of the hairs. Danford also met with it in the Taurus, where, as already observed, it is certainly the commonest species of Lynx.

8. **HYÆNA STRIATA*, Zimm. *Zyrtlan*.

Not uncommon near Smyrna and in the southern districts. A specimen was procured at the village of Ortakkeui, between Nazlû and the ruins of Hierapolis. Ainsworth mentions that a white variety was observed by the Euphrates Expedition.

[*GENETTA VULGARIS*, Less.

The Genet is mentioned by Ainsworth as inhabiting the Taurus. It was not met with by Danford; but specimens taken by Canon Tristram in Palestine are in the British Museum.]

9. **HERPESTES ICHNEUMON* (Linn.). *Yer kiopek* (earth-dog).

One specimen only of this animal was procured; it was shot among the reeds on a small stream which flows into the Kutchuk Mendere (little Meander), not far from Ephesus. It is no doubt not uncommon in many localities; in Palestine Canon Tristram found it in incredible numbers.

10. **CANIS LUPUS*, Linn. *Kurt, Yanovar*.

Generally common throughout the country. The Black Wolf, separated by Schreber as *C. lycaon*, appears to occur in the mountains of the south-eastern districts; for Tchihatcheff saw some skins in the Antitaurus, in the house of a Turkish hunter, who assured him that he had killed the animals himself, and Black Wolves were seen by the Euphrates Expedition on the banks of the Sajúr.

11. **CANIS AUREUS*, Linn. *Schakal*.

Generally common, especially in the south.

12. **CANIS VULPES*, Linn.? *Telki*.

Common in the mountains of the Taurus, and generally distributed.

buted throughout the country. It was even met with on the barren plateau of the interior.

An imperfect skin brought home is extremely pale in colour and long in the fur, that of the lower parts being light smoky grey; and these characters were constant in all the individuals which Danford observed. It very much resembles the type of *Vulpes flavescens*, Gray¹, originally stated to be from Persia, with which Canon Tristram doubtfully identified the Fox of Northern Palestine. But Gray subsequently identified his species with Indian specimens, and there appear to be doubts as to the locality of the type². With the imperfect material at our command, we think it safest for the present to regard the Fox of Asia Minor as a pale long-haired race of *C. vulpes*.

13. *MELES TAXUS (Schreb.). *Porsook*.

Appears to be not uncommon among the mountains. Specimens were obtained at Zebil in the Taurus; the fur of one brought home is as pale-coloured as that of the Persian Badger separated by Mr. Blanford as *M. canescens*³. Its skull also agrees with that of his type specimen in having two lateral ridges on the hinder part of the palate; but in other respects it rather resembles European examples, and the last upper molar is even broader than in many of the latter, measuring $\cdot 50 \times \cdot 58$ in. At present, therefore, we cannot help regarding the claim of *M. canescens* to specific distinction with grave suspicion.

“The Ratel” is mentioned by Ainsworth as an inhabitant of the Taurus, and a species of *Ratelus* is said by Schmarda to be found in Mesopotamia; but Mr. Blanford has suggested a possible confusion with the somewhat similarly coloured Badger.

[ICTONYX ZORILLA (Thunb.).

We introduce this species on the authority of Mr. Keith Abbott, who sent home a specimen which had been forwarded to him alive from the neighbourhood of Erzeroom, where he states it is called *Gheurjen*. Mr. Bennett says that this example scarcely differed from a North-African specimen. As far as we are aware, this is the only record of the existence of the Zorilla in Asia Minor; and it has not yet been found in Palestine.]

14. *MARTES FOINA (Linn.). *Samsar*.

Tolerably common among the mountains. The skins are in great request, and cost considerably more than in England. Some specimens were obtained in the Taurus; and Ainsworth mentions it as inhabiting the Chamkú Bel and Kará Bel mountains. His “Sable” is probably either this species or *M. abietum*.

15. *MUSTELA VULGARIS, Linn.

A specimen, shot on the 28th March among the débris of stones

¹ Ann. & Mag. Nat. Hist. xi. (1843), p. 118.

² Cat. Carn. &c. Mamm. (1869), p. 203. Cf. Blanford *tom. cit.* p. 40.

³ Ann. & Mag. Nat. Hist. xvi. (1875), p. 310; Eastern Persia, ii. pl. iii.

on a hill-side near Anascha, in the Taurus, at an elevation of about 4000 feet, is pure white, excepting a patch on the top of the head and a few hairs on the extreme tip of the tail. From the surprise evinced by the natives it appeared that such examples are very uncommon; but Ménériés records that "M. le Docteur Conradi en tua une variété blanche près des eaux du Caucase en janvier." Our specimen is large, with a proportionally long tail, as in the Italian race separated as *M. boccamela*.

[? *MUSTELA SARMATICA*, Pall.

Ainsworth says that "a *Mustela*, perhaps *M. sarmatica*, is found on the plains;" and Kotschy speaks of having seen "*Viverra sarmatica*," but did not obtain specimens. Danford saw various Weasels without being able to identify them with certainty.]

16. **LUTRA VULGARIS*, Erxl. *Su-itti* (water-beast), *Kundush*.

Not uncommon, especially on the trout-streams of the Taurus. Specimens procured on the Cydnus differ in no way from the ordinary English animal, except in being perhaps slightly lighter in colour. In the Caucasus Ménériés suspected the existence of a second species, of which the fur was said to be lighter in colour and more valuable than that of the Common Otter. The "Grey Beaver, or *Kondoöz*," which Mr. Curzon mentions as inhabiting Armenia, is evidently merely the Otter.

17. **URSUS ARCTOS*, Linn. *Aiyee*.

Generally common among the mountainous coast-districts, especially in thickly wooded regions bordering on the Black Sea. Great numbers of skins are exported from Ineboli. Not having been able to obtain a specimen on the southern side, we can make no precise statement as to the occurrence of the ordinary Brown Bear in that part of the country. The natives say that there are both brown and grey Bears, the latter being sometimes almost white. One seen near Mersina was very dark in colour; the wetness of the day, however, may have had something to do with this. Should both forms be here found together, there will be strong reason for regarding the following as merely a climatic variety of *U. arctos*.

18. *URSUS SYRIACUS*, Ehrenb. *Aiyee*.

Common in the south-east. A specimen brought to us at Gozna, near Mersina, which had been shot a few days before our arrival, had the colouring characteristic of the Syrian form.

[*PHOCA*, sp. ?

A Seal observed off the island of Rhodes was doubtless either *P. monachus*, Herm., or *Ph. vitulina*, Linn.]

19. *SUS SCROFA*, Linn. *Domoöz*, *Yaban domoöz* (wild pig).

Very common throughout the country wherever a sufficient cover of forest-bush or reed is to be found.

20. *CERVUS ELAPHUS, Linn. *Süyün.*

Common in the thickly wooded districts of the north-west. Many stags' heads seen at Ismid near Constantinople appeared all to belong to the usual type of *C. elaphus*. It also occurs on the southern side of the Cilician Taurus, and appears to be more numerous on the Kermesdagh and in the neighbourhood of Marasch. Herr Kotschy alludes to "the yet unknown Stag of the wide Pyramus woods," near which river Danford has been since informed that they are to be met with. Some horns seen at Kaisariyeh, and a pair in our possession alleged to come from the latter districts, are of great size compared with those of animals killed in the north.

21. *CERVUS DAMA, Lana. *Yamoorcha.*

Common on the plains of the south coast and in the lower elevations of the mountains bordering upon them. At Adalia Danford met with the Fallow Deer, among the bushy scrub, within a mile of the town. According to Ainsworth, they are especially common on the Kará Bel and Chamkú Bel Mountains.

22. *CERVUS CAPREOLUS, Linn. *Karadja.*

Generally distributed in the wooded districts, but more common in the north than in the south. Its existence in the Lebanon has recently been established by Canon Tristram and Professor Newton¹. The horns seem to correspond with the European form; but the skin appears to differ in the length and texture of the hair, that of a specimen killed in the Cilician Taurus being shorter and finer.

23. GAZELLA DORCAS (Linn.). *Jairan.*

Not uncommon on the plain of Tehukur-ova and about Tarsus and Adana. Ainsworth says that this species is replaced on the Tigris, near Kút Aamárah, by *G. subgutturosa*.

24. *CAPRA ÆGAGRUS, Gmel. *Kayech.*

Common throughout the Taurus and Armenia, but not found in the west or north of the country, or on the isolated Mount Argæus, near Cæsarea. Its vertical range extends from the mountain-summits to (in some districts) the sea-level. For fuller notes on this species as observed by Danford in Asia Minor see P. Z. S. 1875, pp. 458-468.

25. *OVIS GMELINI, Blyth. *Kotch, Yaban köyun* (wild sheep).

Common in many districts of the interior, particularly about the salt lakes in the Vilayet of Konia. It is also found in the elevated plain of Palanga, above Marasch, and thence ranges east and north to Kurdistan and Armenia. It is somewhat remarkable that Danford could find no trace of this animal either in the country to the north of the Ala Dagh or on the wide-reaching grassy plateau between Kaisariyeh and the Black Sea.

It seems hardly ever to occur on the southern slopes of the

¹ P. Z. S. 1876, pp. 420, 701.

Taurus, preferring the barer districts of the north. Herr Kotschy, otherwise so accurate in his observations, must have been misled into stating that ten to twenty Wild Sheep are killed yearly at Gullek, as at that place, which is situated on the south side of the Bulga Dag, we were assured that the species is not found.

Specimens were obtained from the district of Eregli, where they are common, and frequent the salt-licks in large flocks. Winter is the easiest time of the year to get at them, the deep snow which generally covers that part of the country impeding their movements. At other times they are shy, and, owing to the scarcity of cover, very difficult to approach. The severe winter of 1873-74, which was so fatal to the tame breeds of Sheep, also destroyed a great number of the wild species.

Gmelin's Sheep is a very graceful animal, deer-like in its appearance, having long fine limbs, and in the male a thick bushy throat.

The general colours of specimens procured in the middle of March are :—

♂ 4-5 years old. Head, neck, back, and sides, russet-yellow; belly and underparts of legs white; space before the eye, nose, chin, and undersides of the ears whitish; a dark purple-brown mark above the knee on the fore legs, and a darkish line on the chest; the ridge of the neck and back somewhat darker than the rest of the back; neck thick and bushy.

Total length 53 inches, tail 5 inches, ear 4.25 inches, height at shoulder 33 inches.

♀ 2½ years (by mark of mouth). Colour the same as in the male, but markings less decided. No bushy neck and no horns.

Total length 48 inches, height at shoulder 22.5.

Sir V. Brooke considers that the above-mentioned individuals are not sufficiently old to show the typical markings, specimens which he has received from Ararat being much ruddier and having a white saddle-mark. He also expresses his surprise at the female being without horns.

26. **SCIURUS SYRIACUS*, Hempr. & Ehr. *Dereek, Kallay.*

Generally common, especially among the oak- and beech-woods of the lower mountains. This Squirrel is very abundant in Northern Palestine; but its range does not appear to extend to the Caucasus, where *S. vulgaris*, Linn., is stated by Eichwald to abound. *S. fulvus*, Blanf., from Persia, is closely allied to the present species.

27. **SPERMOPHILUS XANTHOPRYMNUM* (Bennett).

Exceedingly common through the whole of the steppe country of the interior through which Danford passed, the ground being in some districts perfectly honeycombed with their holes. They have a loud sharp whistle, and are very much on the alert, seldom straying far from their burrows. It is doubtless to this animal that Mr. Curzon refers under the name of "Lemming."

The Souslik of Asia Minor was described by Mr. Bennett under the name of *Citellus xanthoprymnus*, from a specimen sent to this

Society by Mr. Keith E. Abbott from Erzeroom (now in the British Museum)¹. It was doubtfully referred to *S. musicus* of Ménétriés by Prof. Brandt; and this identification has been generally followed in spite of Brandt's concluding observation:—" *C. xanthoprymnus*, Bennett, vix a *Spermophilo musico diversus*." ² But the animal, of which we have a good series, proves to be quite distinct both from *S. musicus* and from *S. concolor*, with which Bennett compared it, belonging to the division of the genus with well-haired soles. It is much nearer the European *S. citellus* (Linn.), to which it was referred by Ainsworth, but is at once distinguished by its colour and by the shortness of its tail, which hardly exceeds the hind foot in length. As Bennett gives but a short diagnosis, and the species has since been generally overlooked, we add a fuller description.

Ear rudimentary, soles of hind feet hairy, tail short, hardly longer than the hind foot.

Upper parts nearly uniform reddish buff, most of the hairs slate-grey at the base, then whitish, then broadly tipped with light fulvous; these are mixed with black hairs, which are more numerous in some individuals than in others. Tail cylindrical, unicolorous, more brightly fulvous than the back. A ring round each eye, the edges of the lips, chin, and throat whitish, passing into the pale isabelline of the breast and belly. Legs and feet more distinctly fulvous. Approximate measurements (in skin):—

	inches.
Length of head and body (about)	9·50
" tail	1·40
" hind foot	1·40

The only recent writer who has recognized the validity of this species is Dr. Severtzoff, who, on his visit to London, identified with *S. xanthoprymnus* certain Sousliks which he had formerly referred to *S. fulvus*, Licht.³ He says that these specimens were obtained by him near Tashkent and Cheenaz, and by Russoff near Samarkand. If his identification is correct, the range of the species will probably be found to extend through Northern Persia.

[ARCTOMYS, sp. ?

Ainsworth states that *A. marmotta* (Linn.) inhabits the Taurus; but *A. bobac*, Schreb., seems more likely to occur there. No Marmot was met with by Danford.]

28. *MYOXUS DRYAS (Schreb.).

A single specimen was procured at Issa-fakyr, in the interior. Its nest was a round ball of dry grass, and was placed in a dense bush of wild rose. It was once or twice disturbed from this retreat, and was eventually secured by firing at the nest. This example is somewhat remarkable in coloration, the whole back from the nape

¹ P. Z. S. 1835, p. 90.

² Bull. Ac. Petersb. 1844 (ii.) p. 371.

³ Ann. & Mag. Nat. Hist. 1876, xviii. p. 388.

to the tail being strongly washed with bright rufous. Measurements (in spirits):—

Length of head and body	inches.
„ tail	4.25
„ ear	(imperfect.)
„ hind foot	0.45
	0.85

These dimensions considerably exceed those usually quoted; but a specimen of the normal colour in the British Museum (collected by Mlokosievicz in Georgia) is nearly as large. This latter example shows a tendency to yellowish rufous below the ear. Altogether we are inclined to believe that this rare Dormouse will be found to be very variable in colour (as Alston has shown to be the case with *Graphiurus murinus*¹); and we cannot help feeling very doubtful as to the specific validity of Mr. Blanford's Persian *M. pictus*², especially as our Asia-Minor animal has a hind foot proportionally smaller than those of his type specimens.

Ainsworth says that "the Great and Common Dormice" are found in the mountain-forests, probably meaning *M. glis* (Linn.), which is found in the Caucasus and Georgia, and the present species.

[*MUS RATTUS*, Linn.

The late Mr. Bennett described a Rat sent by Mr. Keith Abbott from Trebizond, under the name of *M. latipes*³. It has been doubtfully referred by Giebel to *M. alexandrinus*, Geoffr.⁴; but Bennett's diagnosis appears to accord best with the common Black Rat, which is known to inhabit the Caucasus and Georgia.]

29. *MUS DECUMANUS*, Pall.

This species is stated by Ainsworth to be the common Rat of the country.

30. **MUS MUSCULUS*, Linn. *Sytchan*.

Common in buildings everywhere. One brought home is rather small in size and light in colour, the belly especially being very pale.

31. **MUS SYLVATICUS*, Linn. *Yaban sytchan* (wild mouse).

Probably common. A specimen was caught while running about on the surface of the deep snow, considerably above the tree-growth. Ménétriés obtained this species in the mountains of Talyche, and Canon Tristram on the plains of Palestine.

32. **MUS MYSTACINUS*, sp. n. *Dagh sytchan* (mountain-mouse). (Pl. XXXI.)

Ears moderate, nearly naked, when pressed forward they do not reach the eye. Whiskers very long. Tail nearly as long as the head and body, or even longer, sparsely haired except towards the tip. Upper parts mouse-grey, washed with black along the back,

¹ P. Z. S. 1875, p. 317.

² Ann. & Mag. Nat. Hist. xvi. (1875) p. 311; East. Persia, ii. pl. iv. fig. 2.

³ P. Z. S. 1835, p. 89.

⁴ Algern. Zool. p. 555.